THIS OPINION WAS NOT WRITTEN FOR PUBLICATION

The opinion in support of the decision being entered today

- (1) was not written for publication in a law journal and
- (2) is not binding precedent of the Board.

Paper No. 23

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS

AND INTERFERENCES

Ex parte JOHN B. BATES

Application 08/248,941

ON BRIEF

Before WARREN, KRATZ, and SPIEGEL, Administrative Patent Judges.

KRATZ, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on appeal from the examiner's final rejection of claims 20-22, which are all of the claims pending in this application.

BACKGROUND

Appellant's invention relates to a cathode for a thin film electrochemical cell. An understanding of the invention can be derived from a reading of exemplary claim 20, which is reproduced below.

20. A cathode for a thin-film electrochemical cell comprising an amorphous metal-oxide layer having a submicron microstructure.

The prior art reference of record relied upon by the examiner in rejecting the appealed claims is:

Higashimoto² JP 4-206352 July 28, 1992 (Japanese Kokai Patent Application)

Appellant relies on additional references (See brief,

¹ A requested change of inventorship for this application was approved by the examiner. See Paper No. 12, page 2, and Paper No. 11. However, the appropriate clerical entries to the record noting the changed inventorship have not, as yet, been made.

 $^{^{\}rm 2}$ Our reference to Higashimoto is to the English language translation of record.

page 4).

Claims 20-22³ stand rejected under 35 U.S.C. § 102 as being anticipated by Higashimoto. We reverse this rejection for reasons which follow.

OPINION

We have carefully considered all of the arguments advanced by appellant and the examiner and agree with appellant that the aforementioned rejection is not well founded.

Accordingly, we reverse the stated § 102 rejection.

Under 35 U.S.C. § 102, every limitation of a claim must be identically described in a single prior art reference for it

to anticipate the claim. **See In re Bond**, 910 F.2d 831, 832, 15 USPQ2d 1566, 1567 (Fed. Cir. 1990). Moreover, it is well settled that the examiner bears the initial burden of presenting a **prima facie** case of unpatentability. **In re**

³ We note that the physical entry of the amendment filed August 14, 1995 (Paper No. 10) has not, as yet, been completed.

Spada, 911 F.2d 705, 707 n.3, 15 USPQ2d 1655, 1657 n.3 (Fed.
Cir. 1990).

Appellant's claim 20, which is the only independent claim on appeal, requires that the cathode comprise "an amorphous metal-oxide layer having a submicron microstructure." The examiner takes the position that the cathode of Higashimoto inherently has "a packed submicron microstructure, even if only on the atomic level" (answer, page 3). Moreover, the examiner urges that Higashimoto (page 5, lines 5-18 and page 6, lines 24-26) discloses an amorphous metal oxide cathode layer.

The examiner's argument is not persuasive because the examiner has not established that Higashimoto necessarily produces a cathode with a submicron microstructure corresponding

to appellant's cathode microstructure. In this regard, we note that appellant defines the claimed submicron microstructure as requiring a submicron grain size structure as depicted in figure 4(b) of the drawings and as described

in appellant's specification (page 9, line 5, through page 10, line 19).4

In any anticipation or obviousness analysis, the claim must first be correctly construed to define the scope and meaning of each contested limitation. *Gechter v.*Davidson, 116 F.3d 1454, 1457, 1460 n.3, 43 USPQ2d 1030, 1032, 1035 n.3 (Fed. Cir. 1997).

Claims in an application are to be given their broadest reasonable interpretation consistent with the specification, and that claim language should be read in light of the specification as it would be interpreted by one of ordinary skill in the art.

In re Sneed, 710 F.2d 1544, 1548, 218 USPQ 385, 388 (Fed. Cir. 1983). Giving the broadest reasonable interpretation to the claimed term "submicron microstructure" consistent with pages

⁴ See Paper No. 10, page 2, wherein appellant discussed how the amended claim language relating to the submicron structure is supported in the original application and differs from the cathode of Higashimoto. Also, see pages 2, 4, and 5 of appellant's brief.

and 10 of the specification and figure 4(b) of the drawings, we agree with appellant that one of ordinary skill in the art would have interpreted this term to mean a microstructure with specific physical characteristics and grain sizes as depicted in figure 4(b). We do not find the examiner's attempt at correlating the atomic level structure of Higashimoto (answer, page 5) with the herein claimed submicron microstructure convincing in light of the above discussion and for reasons as set forth in appellant's brief.

The examiner further argues that Higashimoto teaches an amorphous cathode product material noting that "the mere step of dissolving V_2O_5 in water would certainly not change the amorphous material to a crystalline product" (answer, page 4). However, the examiner's reasoning is deficient in failing to address the effect of the subsequent drying and heating of the applied dissolved V_2O_5 to form the cathode layer. See, e.g., the description of the cathode formation process at page 5 of

Higashimoto. While we are cognizant that Higashimoto (page 6,

lines 24-26) speculates as to a presumed difference of his cathode structure from crystalline V_2O_5 as noted by the examiner, the examiner has not reasonably established that Higashimoto would necessarily obtain an amorphous layer corresponding to appellant's claimed layer based on this record. **See In re Robertson**, 169 F.3d 743, 745, 49 USPQ2d 1949, 1950-51 (Fed. Cir. 1999).

Consequently, the examiner has not established that Higashimoto discloses each element of appellant's claimed cathode within the meaning of 35 U.S.C. § 102 and, therefore, has not set forth a *prima facie* case of anticipation.

Accordingly, the rejection of the claims on appeal under 35 U.S.C. § 102 is reversed.

CONCLUSION

To summarize, the decision of the examiner to reject claims 20-22 under 35 U.S.C. § 102 as being anticipated by Higashimoto is reversed.

REVERSED

| | CHARLES F. WARREN | |) | | |
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| | Administrative Patent | Judge |) | | |
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| | PETER F. KRATZ | |) | APPEALS | AND |
| | Administrative Patent | Judge |) | | |
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| | CAROL A. SPIEGEL | |) | | |
| | Administrative Patent | Judge |) | | |

PFK:psb

George L. Craig Martin Marietta Energy Systems, Inc. P.O. Box 2009 Oak Ridge, TN 37831-8243